

IN THE CLAIMS

1. (Previously Presented) A method comprising:
providing at least one performance object containing a plurality of events;
allowing a user to select a subset of events to be monitored during a collection session from said at least one performance object such that counters associated with events that are not selected from said at least one performance object are not incremented during the collection session;
programming performance counters associated with said subset of events selected to increment in response to an occurrence of a respective event; and
periodically reading data stored in each of said performance counters associated with said selected subset of events during the collection session, wherein at least one of the performance counters associated with the selectable events is implemented using a hardware register and at least another one of the performance counters associated with the selectable events is implemented using a software variable.
2. (Canceled)
3. (Canceled)
4. (Previously Presented) The method of claim 1, wherein said subset of events selected by the user includes at least one of said plurality of events contained in said at least one performance object.
5. (Previously Presented) The method of claim 1, wherein said subset of events selected by the user includes all of said plurality of events contained in said at least one performance object.
6. (Original) The method of claim 1, wherein at least one of the events in the performance object has at least one customization option associated therewith; and said method further comprising allowing the user to customize performance data collection of said at least one of the events by selecting said at least one customization option associated therewith.
7. (Original) The method of claim 6, further comprising generating a new name for a selected event if collection thereof has been customized.

8. (Previously Presented) The method of claim 1, wherein said subset of events selected by the user includes at least one event associated with a hardware component and at least one event associated with a user application.

9. (Previously Presented) The method of claim 8, wherein said subset of events selected by the user further includes at least one event associated with an operating system function.

10. (Previously Presented) A machine readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations comprising:

configuring a collection session by allowing a user to selectively choose a subset of events to be monitored during a collection session from a performance object containing a list of events such that counters associated with events that are not selected from the performance object are not incremented during the collection session;

programming performance counters associated with the subset of events selected by the user to count the occurrence of a respective event prior to the collection session; and

reading data stored in the performance counters during the collection session, wherein at least one of the performance counters associated with the selectable events is implemented using a hardware register and at least another one of the performance counters associated with the selectable events is implemented using a software variable.

11. (Canceled)

12. (Canceled)

13. (Original) The medium of claim 10, wherein the operations further comprise displaying names and descriptions of each event associated with the performance object.

14. (Original) The medium of claim 10, wherein the configuring of the collection session further comprises allowing the user to configure when the respective performance counter is incremented.

15. (Original) The medium of claim 10, wherein the programming of the performance counters is accomplished by a performance dynamic link library (performance DLL) which

sends commands to a respective performance counter residing in a hardware component via a respective device driver to count the occurrence of a respective event.

16. (Original) The medium of claim 10, wherein a plurality of performance objects are supported by a performance dynamic link library (performance DLL).

17. (Original) The medium of claim 10, wherein said subset of events selected by the user includes at least one event associated with a hardware component and at least one event associated with a user application.

18. (Original) The medium of claim 17, wherein said subset of events selected by the user further includes at least one event associated with an operating system.

19. (Previously Presented) A system comprising:

a plurality of performance counters, each of said performance counters associated with a respective subsystem component of a computer system, each of said performance counter coupled to receive a plurality of event signals generated within the respective subsystem component, wherein at least one of said performance counters includes a hardware register and a controller to selectively couple one of the event signals to the hardware register to increment the hardware register, wherein at least another one of said performance counters is implemented using a software variable; and

an application in communication with at least one of said performance counters, said application to program the controller of said at least one of said performance counters to enable one of the event signals coupled thereto to increment the register thereof in response to an occurrence of a selected event, said application to periodically read data stored in the register of said at least one of said performance counters while the computer system is executing instructions,

wherein the application to enable a user to selectively choose a subset of events to be monitored during a collection session from a performance object containing a list of events such that counters associated with events that are not selected from the performance object are not incremented during the collection session.

20. (Original) The system of claim 19, further comprising at least one performance dynamic link library (performance DLL) which is loaded when the application is executed, said performance DLL serving as a bridge between the application and performance counters that reside in the computer system.

21. (Original) The system of claim 20, wherein the application is capable of executing a number of performance DLLs to allow monitoring of a plurality of subsystem components simultaneously within the computer system.

22. (Original) The system of claim 21, wherein said plurality of subsystem components simultaneously monitored include at least one hardware component, at least one user application and at least one operating system function.

23. (Original) The system of claim 21, wherein the performance DLL is derived from a set of performance application programming interfaces (Performance APIs).

24. (Original) The system of claim 23, wherein the set of performance APIs includes an interface which serves to program the performance counter prior to the collection session to enable one of the event signals coupled to the performance counter to increment the register in response to an occurrence of the selected event.

25. (Original) The system of claim 23, wherein the set of performance APIs includes an interface which serves to generate a new name for a particular event if collection thereof has been customized.

26. (Previously Presented) The method of claim 6, wherein the allowing the user to customize performance data collection of said at least one of the events comprises programming at least one of the performance counters associated with said at least one of the customized events to increment only when said at least one of the customized events occurs during a operating system privilege level.

27. (Previously Presented) The method of claim 6, wherein the allowing the user to customize performance data collection of said at least one of the events comprises programming at least one of the performance counters associated with said at least one of the customized

events to increment only when said at least one of the customized events occurs during a user privilege level.

28. (Previously Presented) The system of claim 19, wherein the application to enable the user to customize performance data collection of a particular event by programming a performance counter associated with the particular event to increment only when the particular event occurs during a operating system privilege level.

29. (Previously Presented) The system of claim 19, wherein the application to enable the user to customize performance data collection of a particular event by programming a performance counter associated with the particular event to increment only when the particular event occurs during a user privilege level.